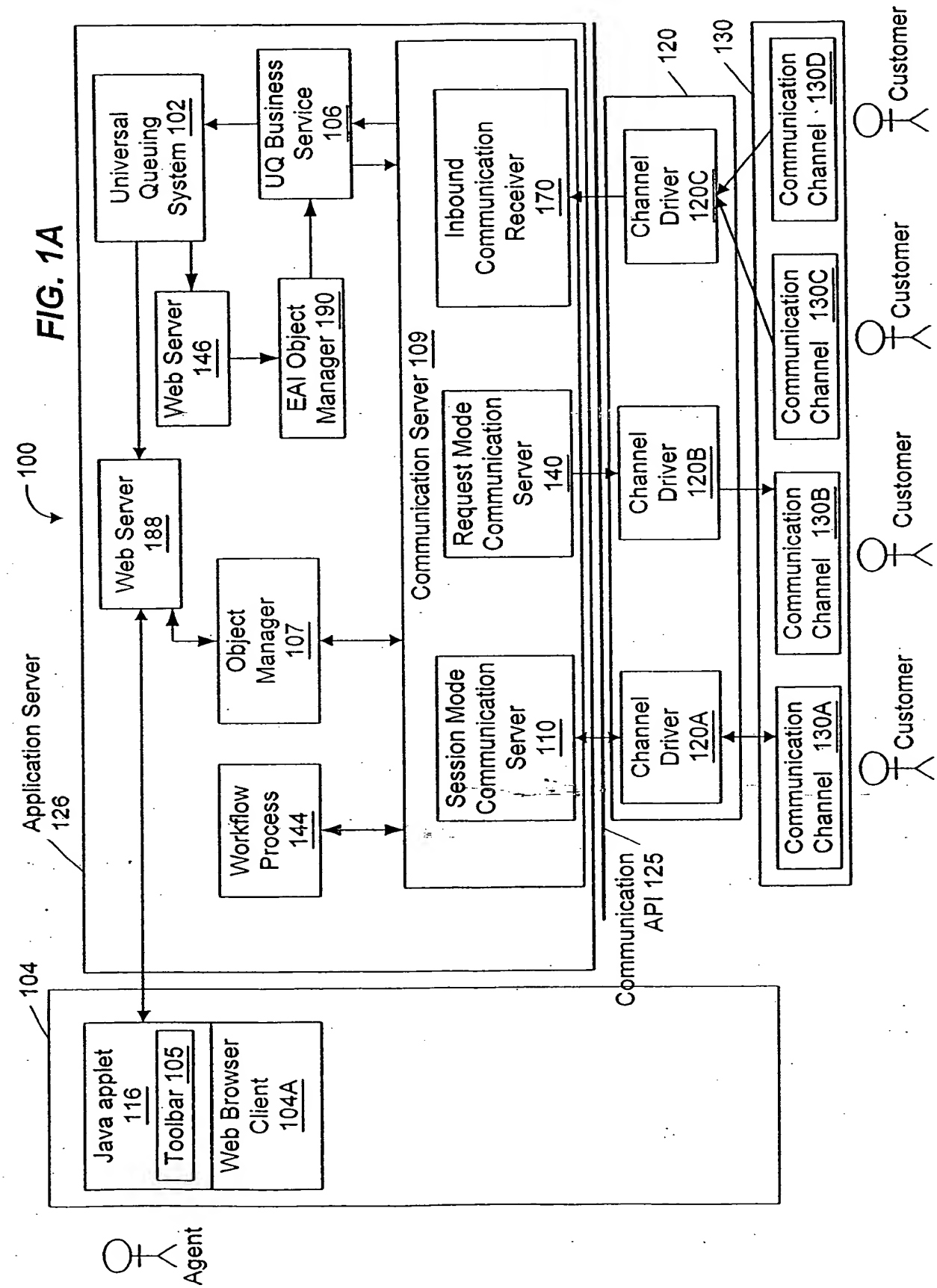
100
Application Server 126
Universal Queuing System 102
UQ Business Service 106
Web Server 146
EAI Object Manager 190
Web Server 188
Object Manager 107
Workflow Process 144
Communication Server 109
Inbound Communication Receiver 170
Request Mode Communication Server 140
Session Mode Communication Server 110
120
130
Channel Driver 120C
Channel Driver 120B
Channel Driver 120A
Communication Channel 130D
Communication Channel 130C
Communication Channel 130B
Communication Channel 130A
Customer
Customer
Customer
Customer
Communication API 125
104
Java applet 116
Toolbar 105
Web Browser Client 104A
Agent

FIG. 1A

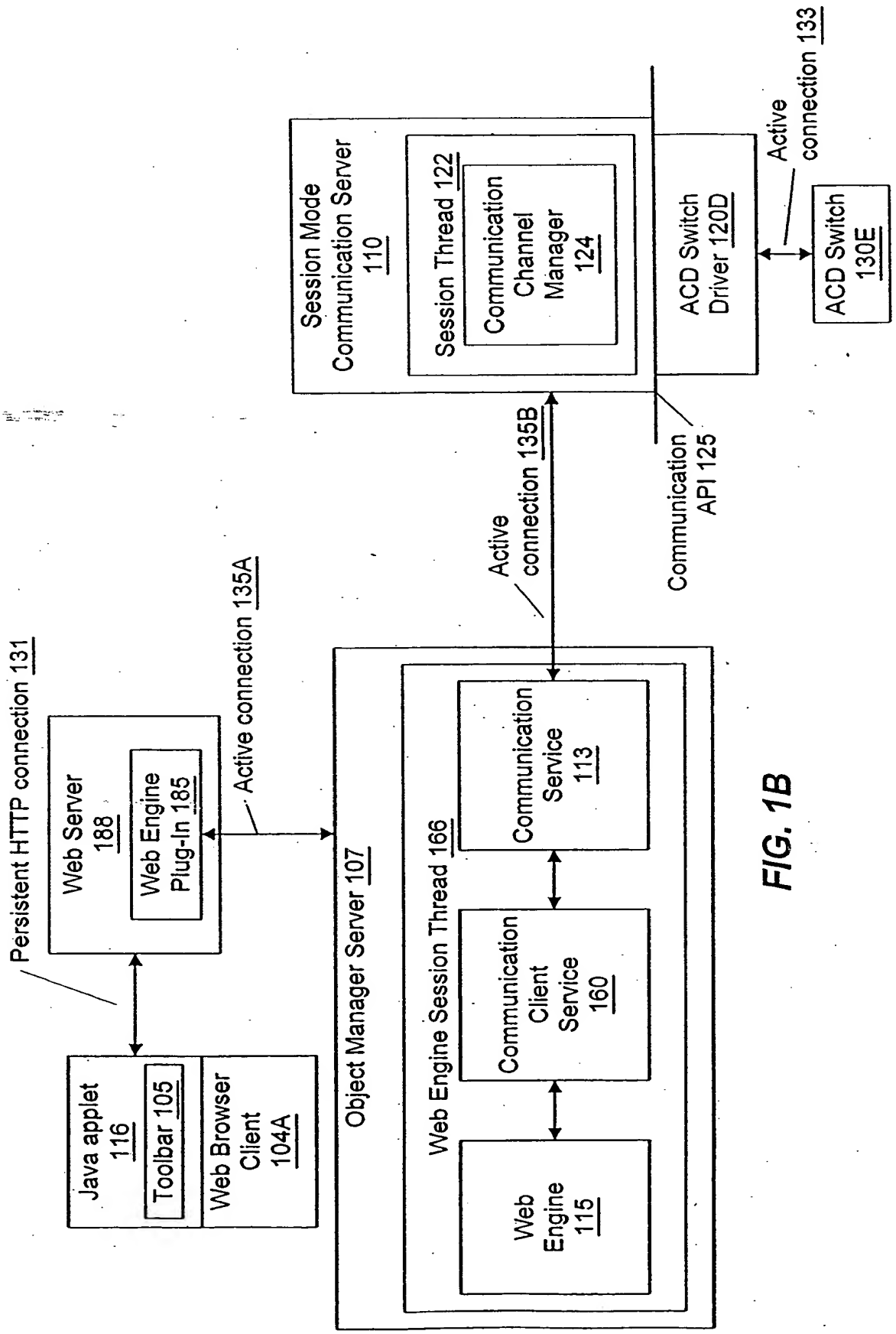
Persistent HTTP connection 131
Web Server 188
Web Engine Plug-In 185
Active connection 135A
Java applet 116
Toolbar 105
Web Browser Client 104A
Object Manager Server 107
Web Engine Session Thread 166
Web Engine 115
Communication Client Service 160
Communication Service 113
Active connection 135B
Communication API 125
Session Mode Communication Server 110
Session Thread 122
Communication Channel Manager 124
ACD Switch Driver 120D
Active connection 133
ACD Switch 130E

FIG. 1B

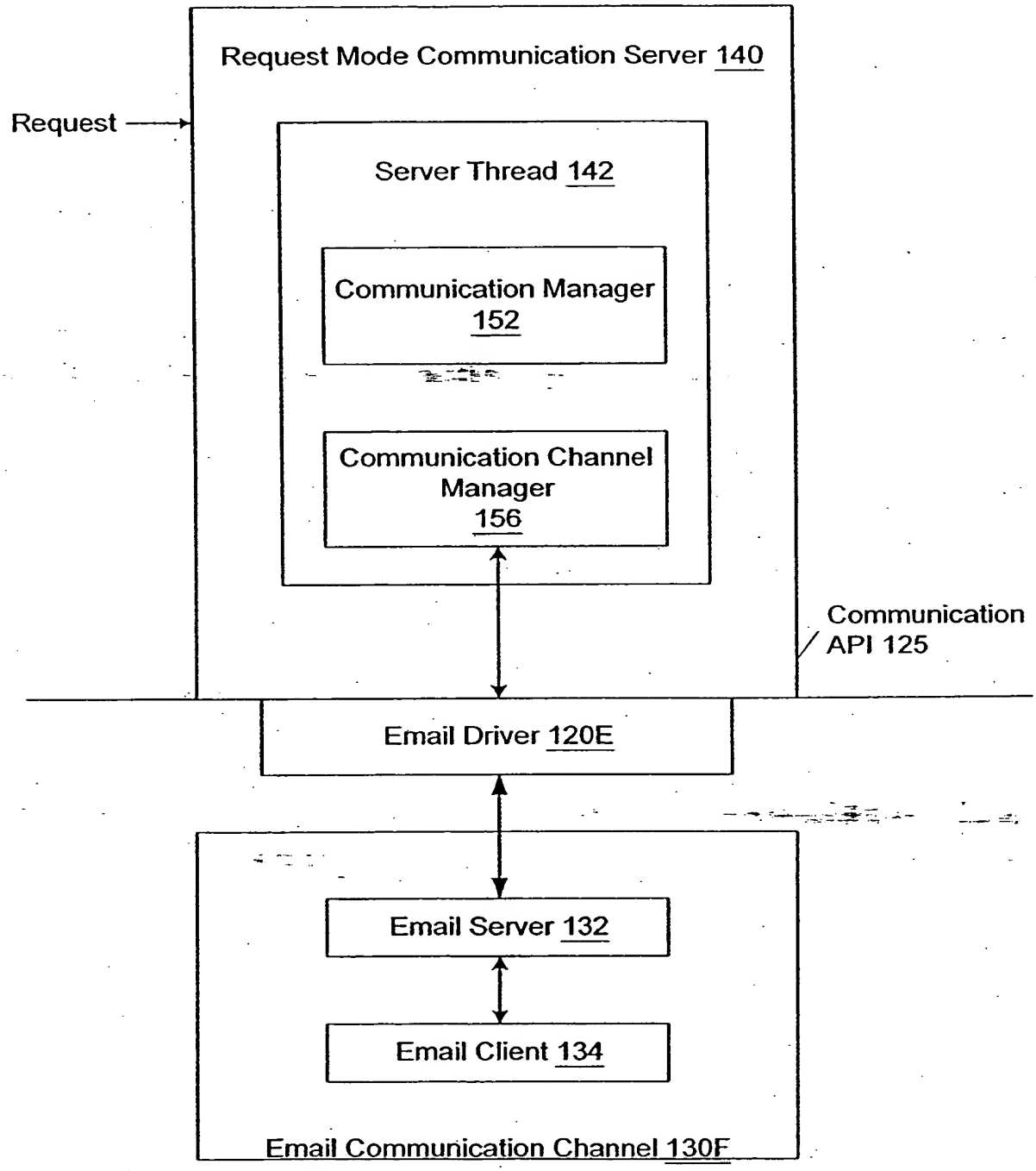
Request Mode Communication Server 140
Request
Server Thread 142
Communication Manager 152
Communication Channel Manager 156
Communication API 125
Email Driver 120E
Email Server 132
Email Client 134
Email Communication Channel 130F

FIG. 1C

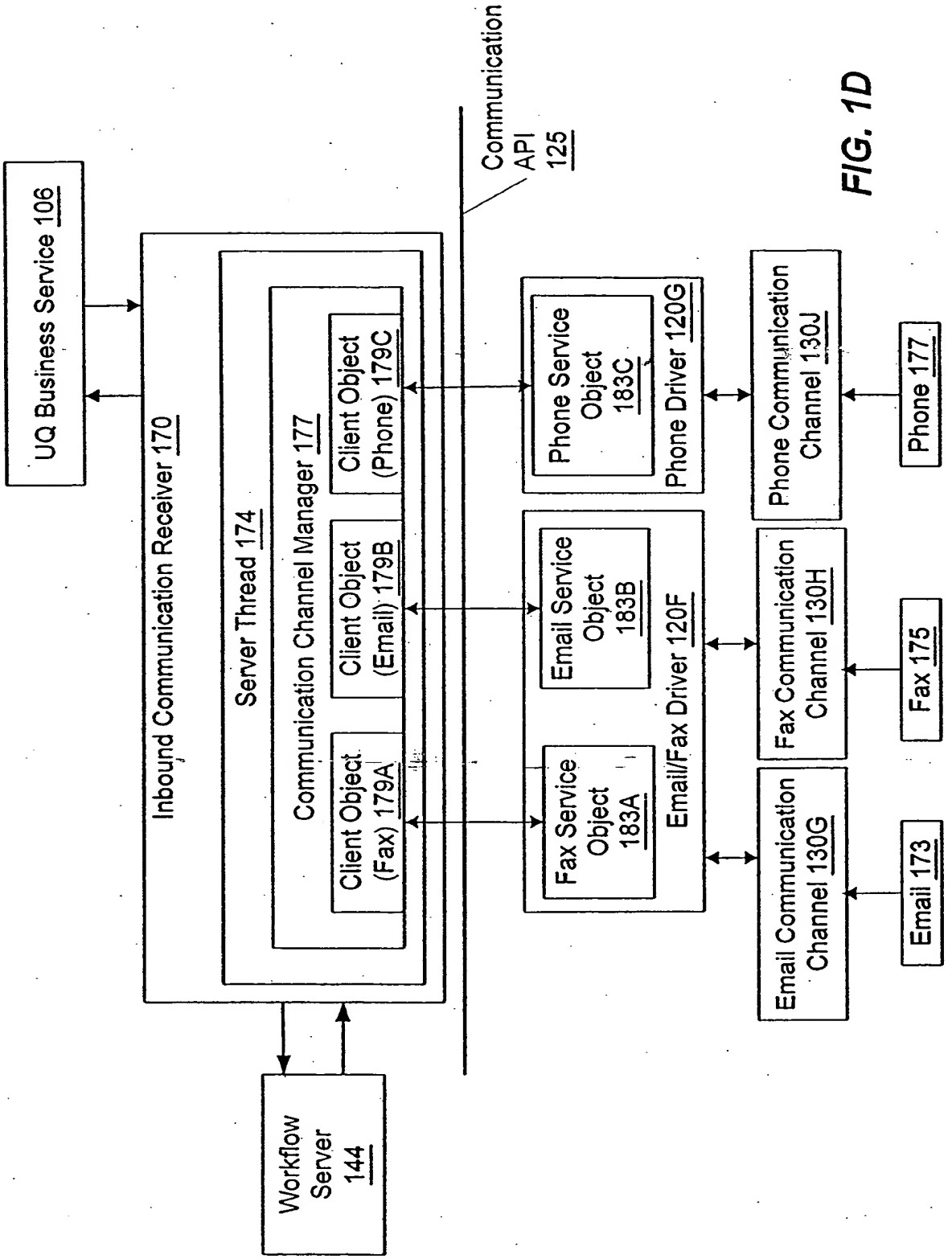

FIG. 1D

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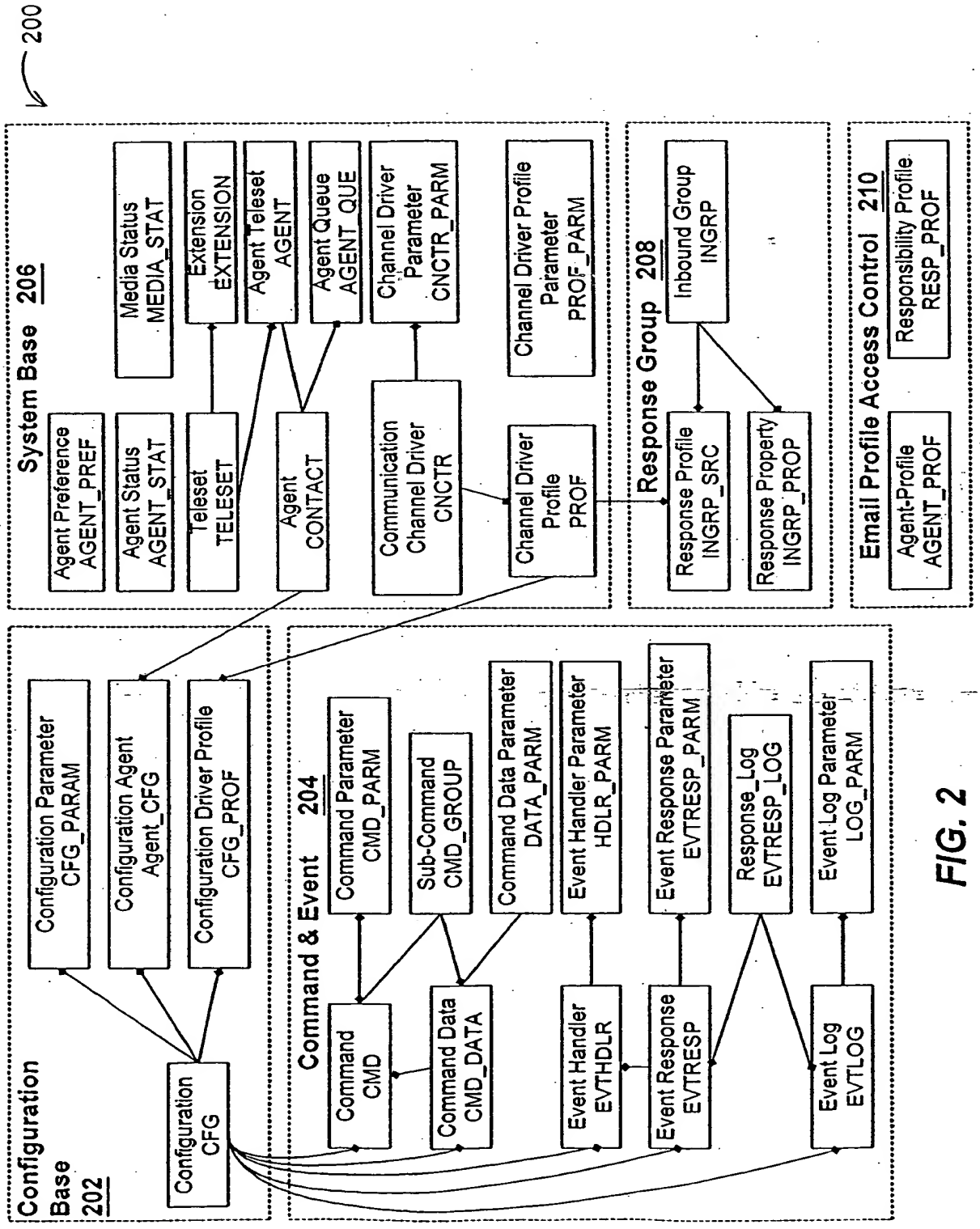
200
System Base 206
Agent Preference AGENT_PREF
Agent Status AGENT_STAT
Teleset TELESET
Agent CONTACT
Communication Channel Driver CNCTR
Channel Driver Profile PROF
Media Status MEDIA_STAT
Extension EXTENSION
Agent Teleset AGENT
Agent Queue AGENT_QUE
Channel Driver Parameter CNCTR_PARM
Channel Driver Profile Parameter PROF_PARM
Response Group 208
Response Profile INGRP_SRC
Response Property INGRP_PROP
Inbound Group INGRP
Email Profile Access Control 210
Agent-Profile AGENT_PROF
Responsibility Profile RESP_PROF
Configuration Base 202
Configuration Parameter CFG_PARAM
Configuration Agent Agent_CFG
Configuration Driver Profile CFG_PROF
Configuration CFG
Command & Event 204
Command CMD
Command Data CMD_DATA
Event Handler EVTHDLR
Event Response EVTRESP
Event Log EVTLOG
Command Parameter CMD_PARM
Sub-Command CMD_GROUP
Command Data Parameter DATA_PARM
Event Handler Parameter HDLR_PARM
Event Response Parameter EVTRESP_PARM
Response_Log EVTRESP_LOG
Event Log Parameter LOG_PARM

FIG. 2

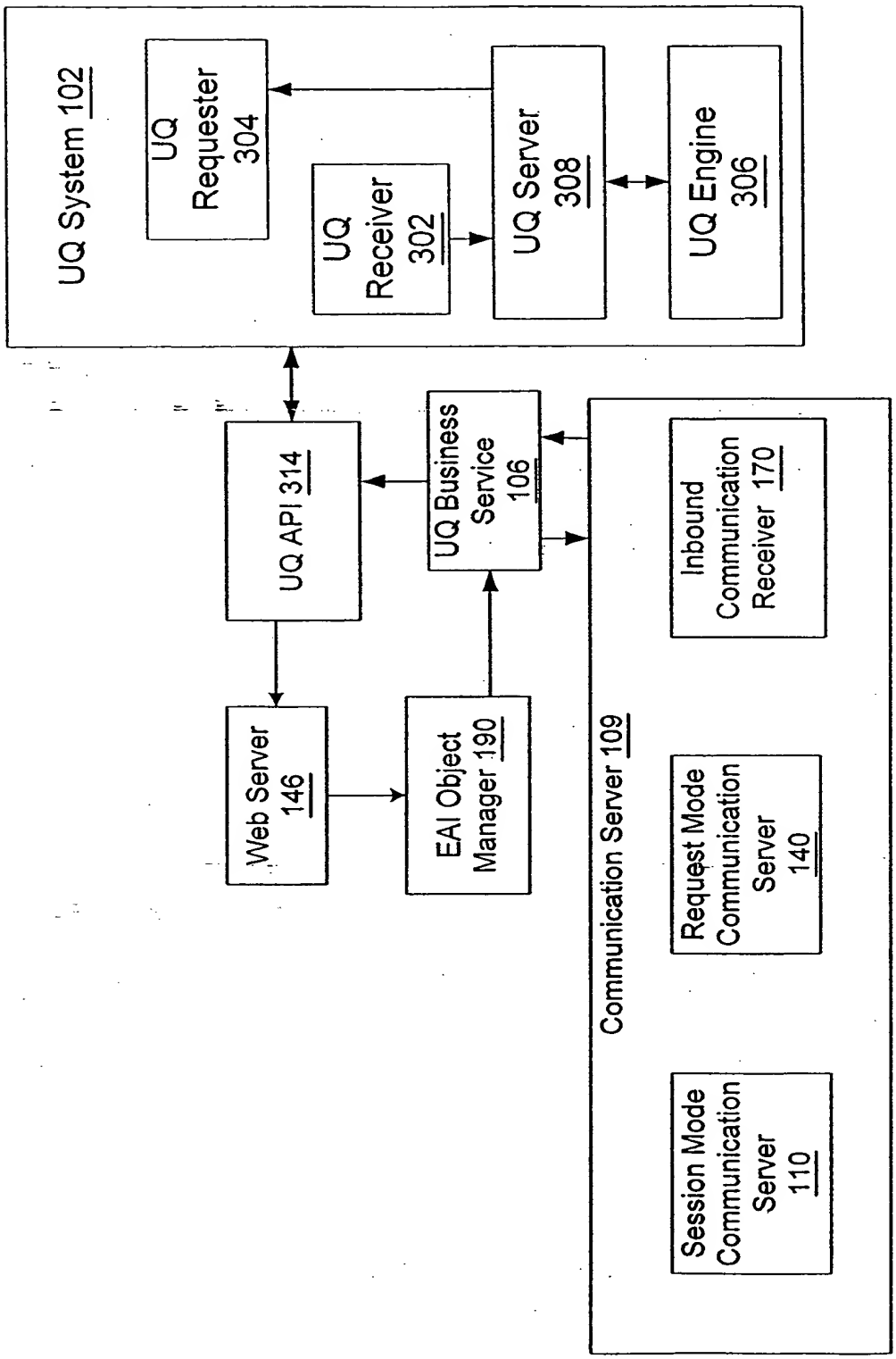
UQ System 102
UQ Requester 304
UQ Receiver 302
UQ Server 308
UQ Engine 306
UQ API 314
UQ Business Service 106
Web Server 146
EAI Object Manager 190
Communication Server 109
Inbound Communication Receiver 170
Request Mode Communication Server 140
Session Mode Communication Server 110

FIG. 3

FIG. 4A: TABLE UQ_CFG

Column_Name	Type	Length	Comments
NAME	Varchar	75	
SERVER_NAME	Varchar	75	
SERVER_PORT	Number	10	
RECEIVER_NAME	Varchar	75	
RECEIVER_PORT	Number	10	

FIG. 4B: TABLE UQ_CFG_PARAM

Column_Name	Type	Length	Comments
UQ_CFG_ID	Varchar	15	
NAME	Varchar	50	
VALUE	Varchar	50	

T06290" 95hS6860

FIG. 4C: TABLE UQ_ROUTERULES

Column_Name	Type	Length	Comments
Rule ID	VarChar	75	User defined name of the route
PRIORITY_CD	Varchar	30	Lower the value, higher the priority.
MEDIA_TYPE_CD	VarChar	30	Select from list of values including "PBX", "Web Chat", "Web Collaboration", "Fax", "E-Mail"
MEDIA_SERVICE_LEVEL	Number	10	The number of seconds by which the majority of the work items need to be handled for a media type to which the routing rule corresponds
ACTIVE_FLG	Char	1	Indicates whether this route is active or not. If the route is not active, information for this route will not be passed to UQ engine.
SERVICE _LEVEL	Number	10	The number of seconds by which the majority of the work items need to be handled in the route
CAPACITY	Number	10	Maximum capacity of this route. Alarm is raised when the number of queued item exceeds the CAPACITY
SELECTION CRITERIA	Char		
IsContact	Boolean	1	
TIME_OUT_SCND	Number	10	Time in second in which when the work item is not server, the first escalation rule will be effective.
RouteToUnavailable	Boolean	1	Can a workitem in this route be routed to an agent who is not available?

Atto[redacted]Docket No.: M-11830 US
First [redacted]ed Inventor: Anil K. Annadata et al.
Title: System and Method For Multi-Channel Communication Queuing Using Routing and Escalation Rules

FIG. 4D: TABLE UQ_ROUTE_PROP

Column_Name	Type	Length	Comments
UQ_ROUTE_ID	Varchar	15	
NAME	Varchar	75	Name of the property
VALUE	Varchar	75	Value of the property

FIG. 4E: TABLE UQ_ROUTE_ESCL

Column_Name	Type	Length	Comments
UQ_ROUTE_ID	Varchar	15	
NAME	Varchar	75	Name of the escalation rules
TIME_OUT_SCND	Number	10	Time in seconds in which the escalation rule will be timed out. Zero time means waiting indefinitely.
SEQ_NUM	Number	10	Order of escalation rules

T06290" 95th56860

FIG. 4F: TABLE UQ_RTESCL_RUL

Column_Name	Type	Length	Comments
ROUTE_ESCL_ID	Varchar	15	
SKILL_NAME	Varchar	50	Skill
SKILL_ITEM	Varchar	50	Name of skill items. For example "English" for Language skill. If skill item is null, it is a substitution of language from the work item data property. This is typically used when different rules for different languages are not required. Languages can be retrieved from the work item data property.
EXPERTISE	Varchar	30	Level of skill is chosen from a list of values, for example: 3 = EXPERT 2 = INTERMEDIATE 1 = NOVICE 0 = NO_SKILL

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Title:
Docket No.: M-11830 US
ed Inventor: Anil K. Annadata et al.
System and Method For Multi-Channel Communication
Queuing Using Routing and Escalation Rules

FIG. 4G: TABLE UQ_SKL_MAP

Column_Name	Type	Length	Comments
ROUTE_PROP_NAME	Varchar	75	Route property name
ROUTE_PROP_VALUE	Varchar	75	Route property value
SKILL_NAME	Varchar	75	Skill name
SKILL_VALUE	Varchar	75	Skill value

FIG. 4H: TABLE UQ_USER_MEDIA

Column_Name	Type	Length	Comments
USER_ID	Varchar	15	Agent number
MEDIA_TYPE_CD	varchar	30	Type of media
MAX_NUM_SESSIONS	Number	10	Maximum sessions of this media type allowed for this agent.

T06290" 95th56860

FIG. 4I: TABLE UQ_ROUTE_STS

Column_Name	Type	Length	Comments
ROUTE_ID	Varchar	75	
START_TS	Date Time		Start time
END_TS	Date Time		End time
SOURCE_NAME	Varchar	75	The route name
AVG_WAIT_TM	Number	10	Waiting time during the given period
AVG_HANDLE_TM	Number	10	Handling time during the period
NUM_ABANDONED_REQS	Number	10	Number of abandoned requests
AVG_ABANDONING_TM	Number	10	Average time until request is abandoned
LONGEST_WAIT_TM	Number	10	Longest waiting time in seconds
AVAIL_USER_PCT	Number	10	Percentage of available agents
AUX_WORK_USER_PCT	Number	10	Percentage of auxwork agents
TOTAL_NUM_WORKITEMS	Number	10	Total number of work items
TOTAL_NUM_UNASSIGNED _WORKITEM	Number		Total number of unassigned work items.
TOTAL_NUM_DELIVERED_ WORKITEM	Number		Total number of delivered work items.
TOTAL_NUM_SERVICE_ LEVEL_WORKITEM	Number		Total number of service level work items.
Comments	Varchar	250	

FIG. 4J: TABLE UQ_MEDIA_STS

Column_Name	Type	Length	Comments
MEDIA_TYPE_CD	Varchar	30	
START_TS	Date Time		
END_TS	Date Time		
SOURCE_NAME	Varchar	75	Either the route name
AVG_WAIT_TM	Number	10	Waiting time during the given period
AVG_HANDLE_TM	Number	10	Handling time during the period
NUM_ABANDONED_REQS	Number	10	Number of abandon request
AVG_ABANDONING_TM	Number	10	
LONGEST_WAIT_TM	Number	10	Longest waiting time in seconds
AVAIL_USER_PCT	Number	10	Percentage of available agents
AUX_WORK_USER_PCT	Number	10	Percentage of auxwork agents
TOTAL_NUM_WORKITEMS	Number	10	Total number of agent if each agent handle only one work item
TOTAL_NUM_UNASSIGNED_WORKITEM	Number		
TOTAL_NUM_DELIVERED_WORKITEM	Number		
TOTAL_NUM_SERVICE_LEVEL_WORKITEM	Number		
Comments	Varchar	250	

FIG. 4K: TABLE UQ_USER_STS

Column_Name	Type	Length	Comments
USER_ID	Varchar	15	
START_TS	Date Time	7	
END_TS	Date Time	7	
CONTACT_ID	Varchar	15	
AVAIL_PCT	Number		Percentage available
BUSY_PCT	Number		Percentage busy
AUX_WORK_PCT	Number		Percentage auxwork
NUM_COMM_ITEM_SRVD	Number		Number of work item served
Comments	Varchar	250	

FIG. 4L: TABLE UQ_ERR_LOG

Column_Name	Type	Length	Comments
Name	DateTime	7	
TYPE_CD	Varchar	30	Either alarm or error
Severity	Varchar	30	
ERROR_CODE	Varchar	10	Alarm code or error code
MSG_DESC	Varchar	250	Template for message

T06290" 95456860

FIG. 4M: S_JOURNAL

Column_Name	Type	Length	Comments
WORK_ITEM_ID	Varchar	250	Work item ID
ROUTE_NAME	Varchar	75	The name of the route. Use the actual name instead of ID because the nature of the route could be changing from time to time.

S_JOURNAL_WORKITEM_PROPERTY

Column_Name	Type	Length	Comments
JOURNAL_ID	Varchar	15	
Name	Varchar	75	Name of the property
Value	Varchar	75	Value of the property

S_JOURNAL_ESC_HIST

Column_Name	Type	Length	Comments
JOURNAL_ID	Varchar	15	
ESC_STEP_NAME	Varchar	75	
START_TIME	Date Time		Start time
END_TIME	Date Time		
RESULT	Varchar	75	

S_JOURNAL_STATE_HIST

Column_Name	Type	Length	Comments
JOURNAL_ID	Varchar	15	
USERID	Varchar	15	
START_TIME	Date Time		Start time
END_TIME	Date Time		
AGENTSTATE	Varchar	50	
REASON	Varchar	50	

T06290" 95h56860

400

Siebel Call Center - Microsoft Internet Explorer

http://localhost:8080/start.swe

Site Map | Help | Profile | Logout

Home | Accounts | Activities | Agreements | Assets | Calendar | Campaigns | Communications | Contacts | Decision Issues | Households | Info Cen

Show: Routes

Route :

402

Routes

New | Edit | 1-7 of 7

	Name	Channel Type	Active	Priority	Non Real-Time	Service Level (mins)	Service Level Percentage (%)	Capacity
404	Wal Route	SD_Email	☑		☐	1	98	10
◇	Wal Route #2	SD_Web Collaboration	✔	2		10	100	50
◇	Temp Route	SD_Web Collaboration		1				
◇	InActive ROute	E-Mail		SD_10		16.667	87	100
◇	Test route 2	E-Mail		10	✔	120	88	120
◇	Fax 1	SD_Fax		8		0.5	75	5
◇	Fax#	SD_Fax		7		5	56	5

406 408

Properties | Escalations

New | Edit | 1-1 of 1

410

	Begin Group	Property Name	Relation	Property Value	End Group	Join
	(	MediaType	=	Email	)	
412		RECIPIENT	=	furniture.com		AND
414	((	CATEGORY	=	chair	)	OR
416	(	CATEGORY	=	table	))	

Done | Local intranet

FIG. 4g

EV 062303 "US"

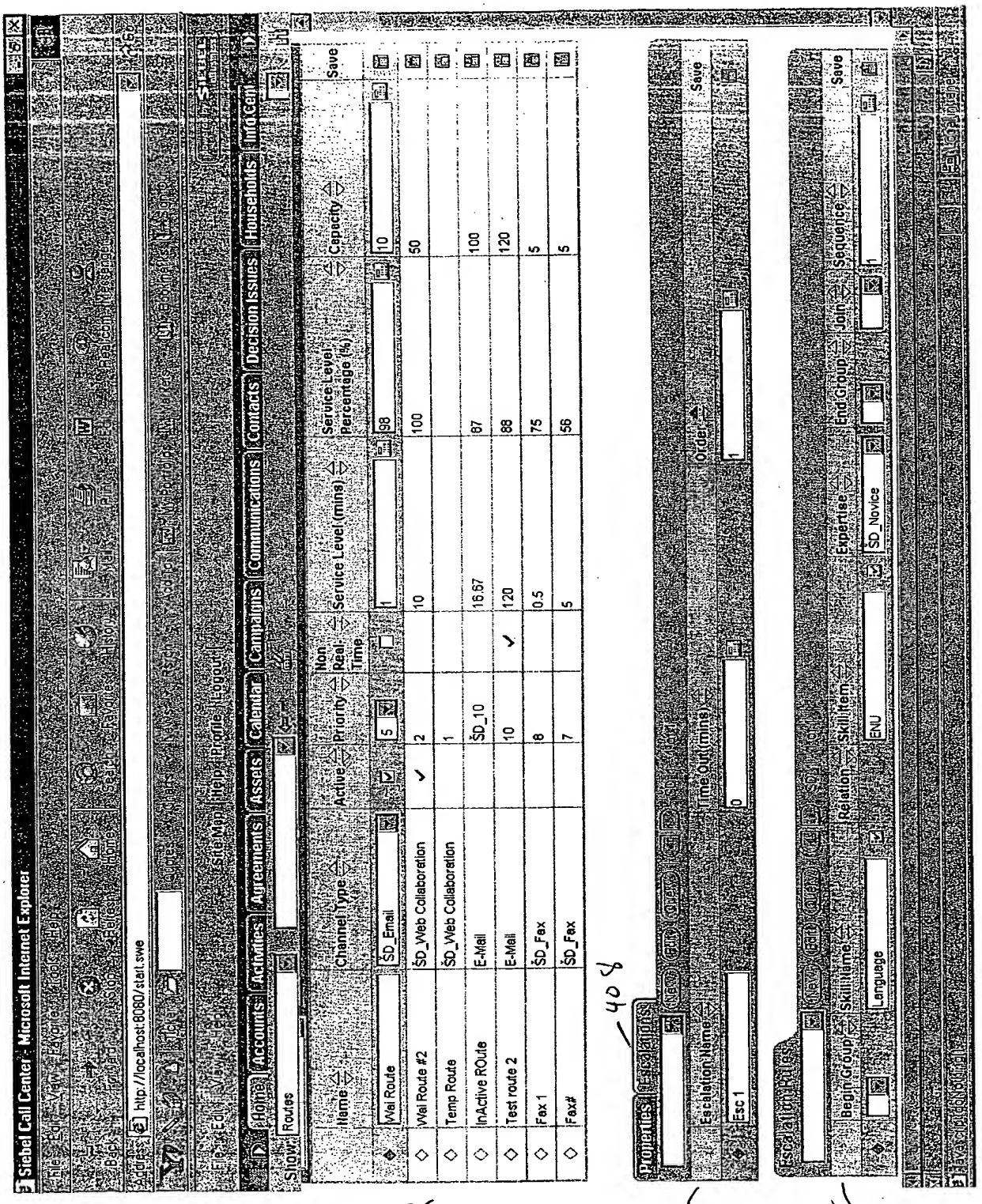

FIG. 4F

T06290 95h56860

424

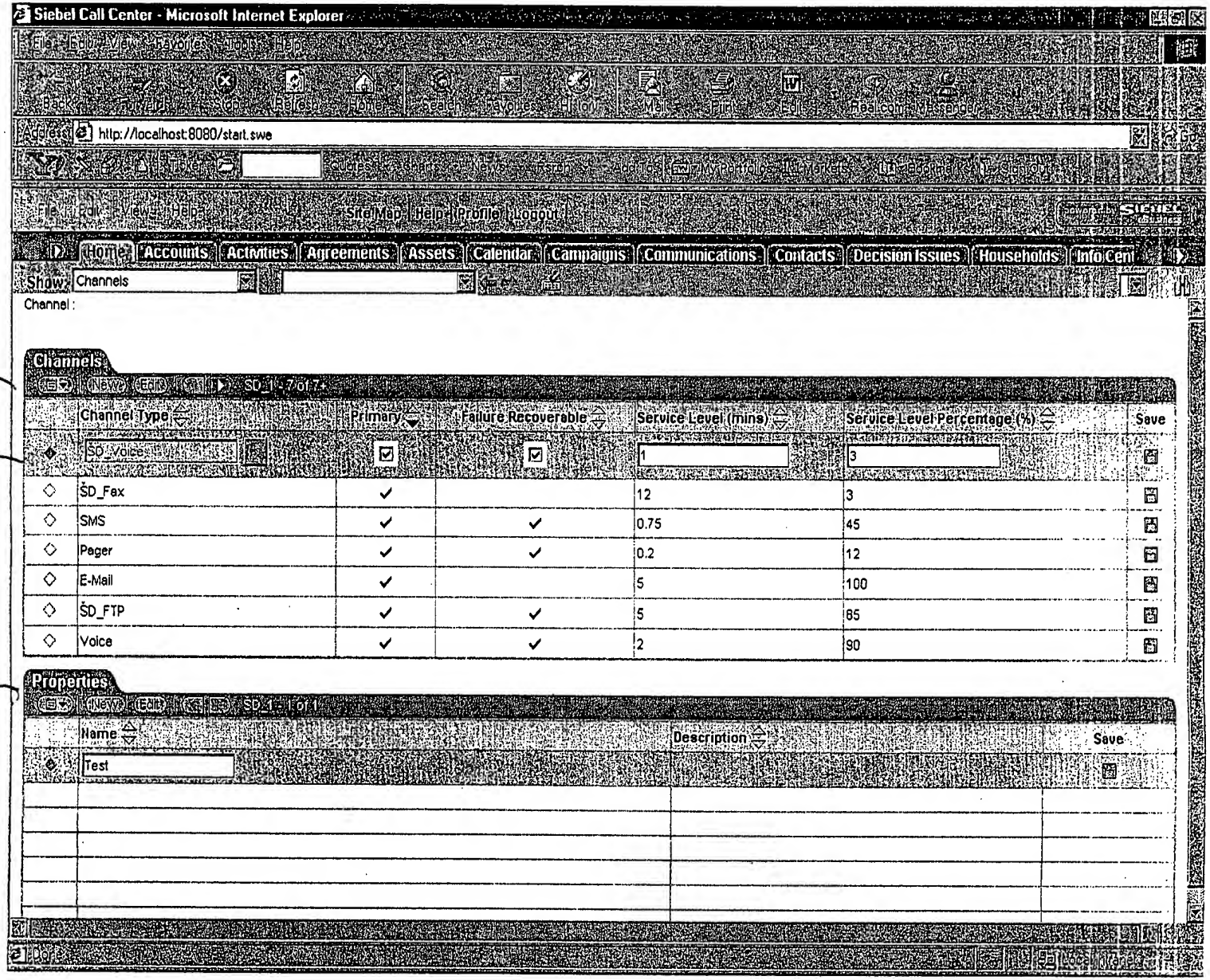

FIG. 4S